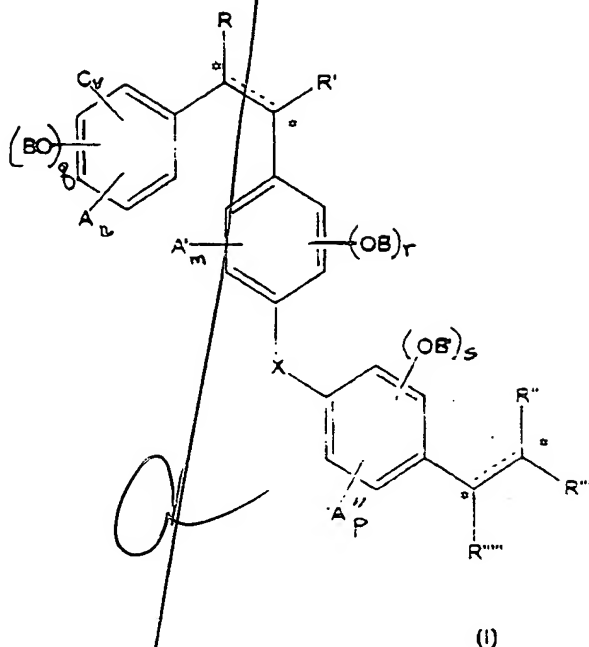


What is claimed is:

1. A compound of the formula I:



wherein stereocenters \* are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR<sub>3</sub>, where R<sub>3</sub> = H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or C<sub>5</sub>-C<sub>20</sub> aryl; CONR<sub>1</sub>R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> may be independently or together H, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl or C<sub>5</sub>-C<sub>20</sub> aryl, NH<sub>2</sub>, OH, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, halo, cyano, or R+R'=O.

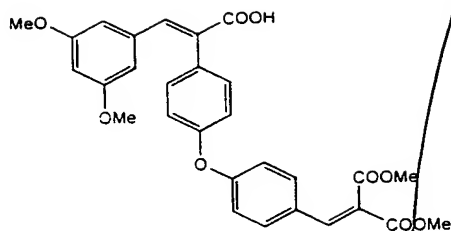
A, A', A'', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, linear or branched C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkylamino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B'' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkyl carboxyl amino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; aroyl, araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

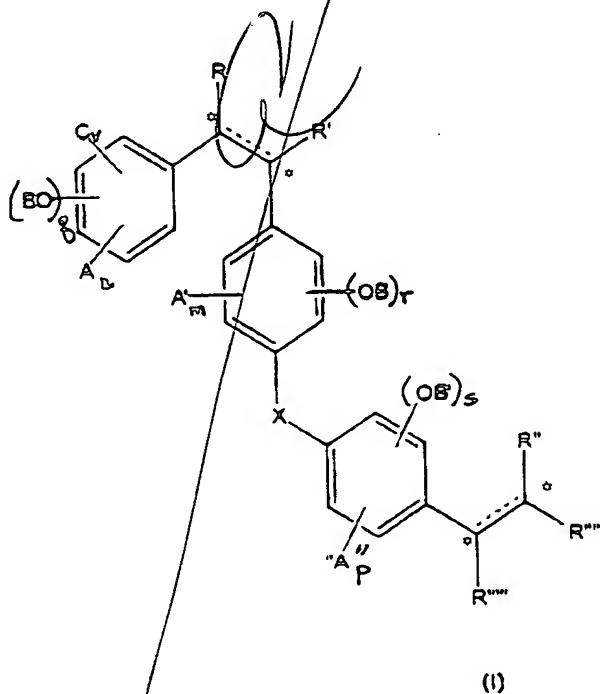
R''', R'''' and R''''' are independently H, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>.

2. A compound according to Claim 1 wherein C and A are hydrogen.
3. A compound according to Claim 2 wherein q=2 and B is methyl.
4. A compound according to Claim 1 wherein A' is hydrogen and r = O.
5. A compound according to Claim 1 wherein A'' is hydrogen and s = O.
6. A compound according to Claim 1 wherein R is hydrogen and R' is -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.
7. A compound according to Claim 1 wherein X is oxygen; R''' is hydrogen; and R''' and R'''' are independently -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.
8. The compound according to Claim 1 of the formula:



9. A pharmaceutical composition containing a blood glucose lowering effective amount of a compound of formula I in a pharmaceutically acceptable carrier.



wherein stereocenters \* are R or S;  
dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR<sub>3</sub>, where R<sub>3</sub> = H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or C<sub>5</sub>-C<sub>20</sub> aryl; CONR<sub>1</sub>R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> may be independently or together H, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl or C<sub>5</sub>-C<sub>20</sub> aryl, NH<sub>2</sub>, OH, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, linear or branched C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkylamino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

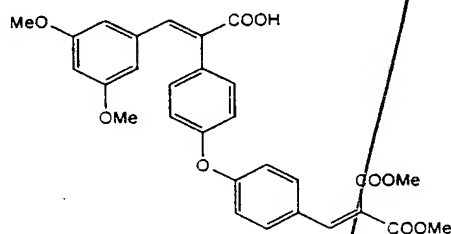
B, B', and B'' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkyl carboxyl amino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; aroyl, araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, or cyano.  
X = NH, O, S, S=O, or SO<sub>2</sub>.

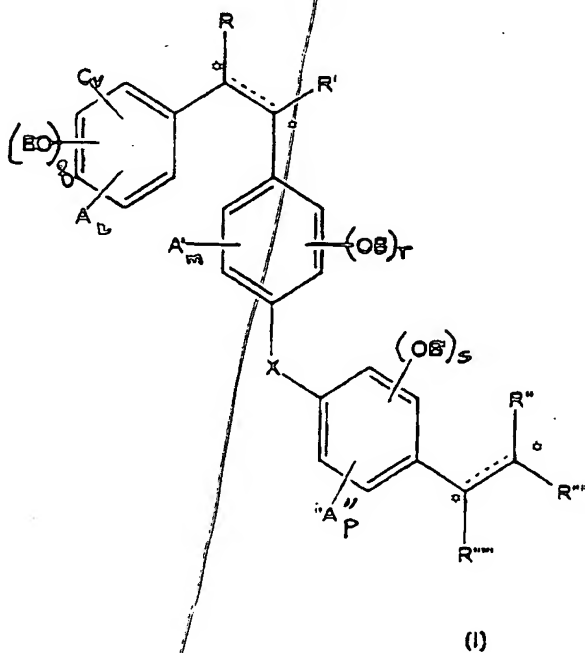
10. A composition according to Claim 9 wherein C and A are hydrogen.
11. A composition according to Claim 10 wherein q=2 and B is methyl.
12. A composition according to Claim 9 wherein A' is hydrogen and r = O.
13. A composition according to Claim 9 wherein A'' is hydrogen and s = O.
14. A composition according to Claim 9 wherein R is hydrogen and R' is -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

16. The composition according to Claim 9 wherein the compound comprises:

16. The composition according to Claim 9 wherein the compound comprises:



17. A method for lowering blood glucose in a subject comprising administering to said subject an effective blood glucose lowering amount of a composition containing a compound of the formula I in a pharmaceutically acceptable carrier.



wherein stereocenters \* are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR<sub>3</sub>, where R<sub>3</sub> = H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or C<sub>5</sub>-C<sub>20</sub> aryl; CONR<sub>1</sub>R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> may be independently or together H, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl or C<sub>5</sub>-C<sub>20</sub> aryl, NH<sub>2</sub>, OH, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, linear or branched C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkylamino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B'' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkyl carboxyl amino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; aroyl, araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>.

18. A method according to Claim 17 wherein C and A are hydrogen.

19. A method according to Claim 18 wherein q=2 and B is methyl.

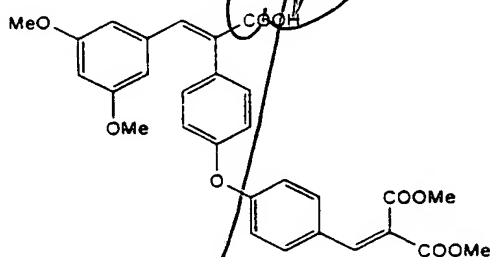
20. A method according to Claim 17 wherein A' is hydrogen and r = 0.

21. A method according to Claim 17 wherein A'' is hydrogen and s = 0.

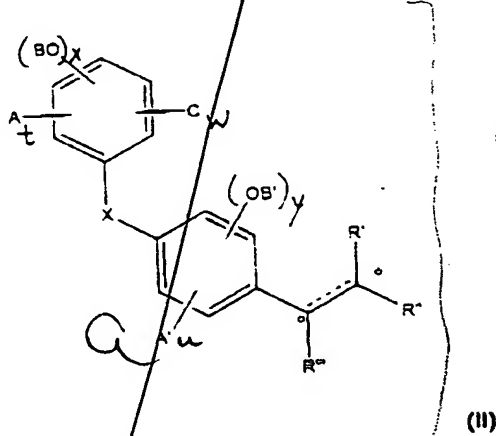
22. A method according to Claim 17 wherein R is hydrogen and R' is  $-\text{COOR}_3$ , wherein  $R_3$  is hydrogen, a cation,  $\text{C}_1\text{-C}_{10}$  alkyl or  $\text{C}_5\text{-C}_{10}$  aryl.

23. A method according to Claim 17 in formula I wherein X is oxygen; R''' is hydrogen; and R''' and R''' are independently  $-\text{COOR}_3$ , wherein  $R_3$  is hydrogen, a cation,  $\text{C}_1\text{-C}_{10}$  alkyl or  $\text{C}_5\text{-C}_{10}$  aryl.

24. The method according to Claim 17 wherein said compound comprises:



25. A compound of the formula II:



use the new formula II,  
shown on p.2 of the  
amendment filed  
July 19, 2001

wherein stereocenters \* are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

A, A', and C are independently H,  $\text{C}_1\text{-C}_{20}$  acylamino,  $\text{C}_1\text{-C}_{20}$  acyloxy,  $\text{C}_1\text{-C}_{20}$  alkoxy,  $\text{C}_1\text{-C}_{20}$  linear or branched alkyl amino,  $\text{C}_1\text{-C}_{20}$

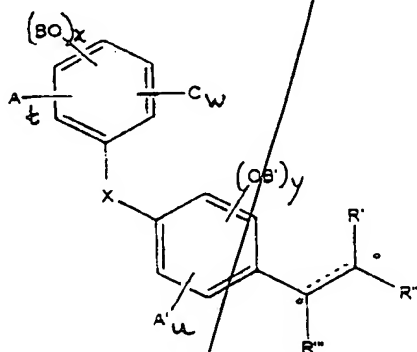
alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkenoyl, C<sub>1</sub>-C<sub>20</sub> alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>6</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> aralkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxy, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>

26. A pharmaceutically composition containing a blood glucose lowering effective amount of a compound of the formula II in a pharmaceutically acceptable carrier.



(II)

wherein stereocenters \* are R or S;

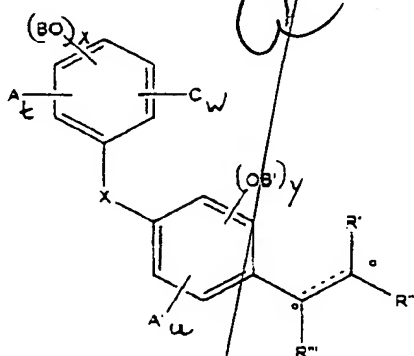
dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

A, A', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;



$$X = \text{NH}, \text{O}, \text{S}, \text{S}=\text{O}, \text{ or } \text{SO}_2$$

27. A method for lowering blood glucose in a subject comprising administering to said subject an effective blood glucose lowering amount of a composition of the formula II.



(ii)

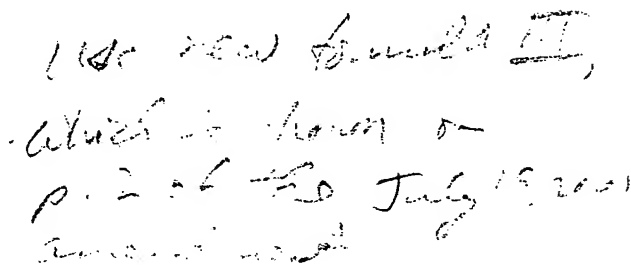
dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z:

A, A', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

5

$$X = \text{NH, O, S, S=O, or SO}_2$$

10



20

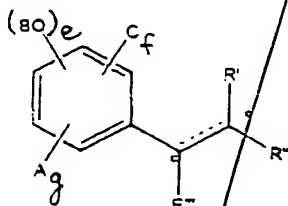
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R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, cyano.

29. A pharmaceutically composition containing a blood glucose lowering effective amount of a compound of the formula III in a pharmaceutically acceptable carrier.



wherein stereocenters (designated by \*) could be R- or S-.

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

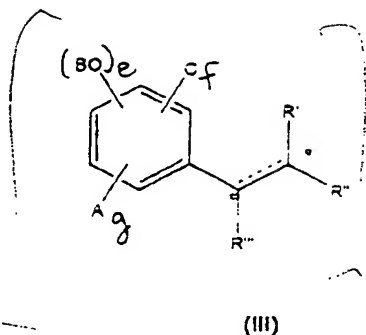
A and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR<sub>2</sub>; and f and g are independently integers from 0 to 3;

B is independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>5</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, cyano.

30. A method for lowering blood glucose in a subject comprising administering to said subject an effective blood glucose lowering amount of a composition of the formula III.

new formula III



wherein stereocenters (designated by \*) could be R- or S-.

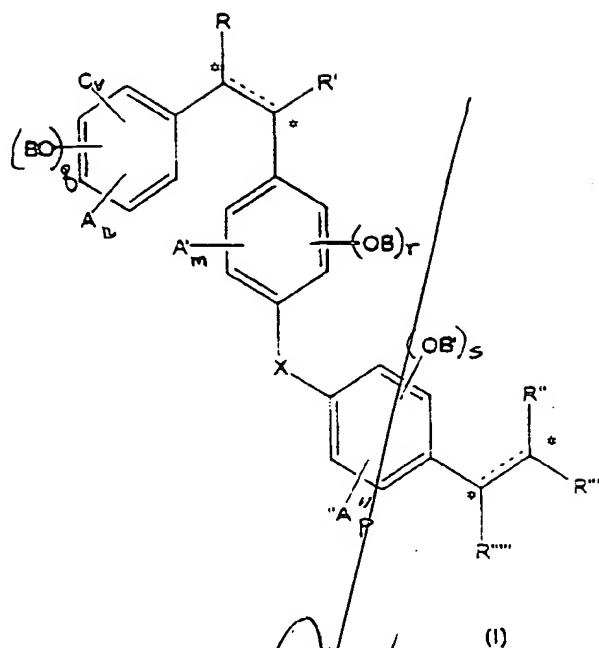
dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR<sub>2</sub>; and f and g are independently integers from 0 to 3;

B is independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>5</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, cyano.

31. A pharmaceutical composition containing a serum triglyceride lowering effective amount of a compound of formula I in a pharmaceutically acceptable carrier.



wherein stereocenters \* are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR<sub>3</sub>, where R<sub>3</sub> = H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or C<sub>5</sub>-C<sub>20</sub> aryl; CONR<sub>1</sub>R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> may be independently or together H, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl or C<sub>5</sub>-C<sub>20</sub> aryl, NH<sub>2</sub>, OH, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, linear or branched C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkylamino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B'' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkyl carboxyl amino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; aroyl, araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents. COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, or cyano.  
X = NH, O, S, S=O, or SO<sub>2</sub>.

32. A composition according to Claim 31 wherein C and A are hydrogen.

33. A composition according to Claim 32 wherein q=2 and B is methyl.

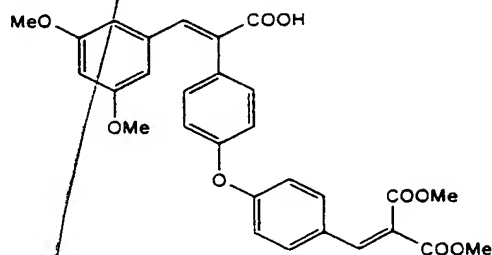
34. A composition according to Claim 31 wherein A' is hydrogen and r = o.

35. A composition according to Claim 31 wherein A'' is hydrogen and s = o.

36. A composition according to Claim 31 wherein R is hydrogen and R' is -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

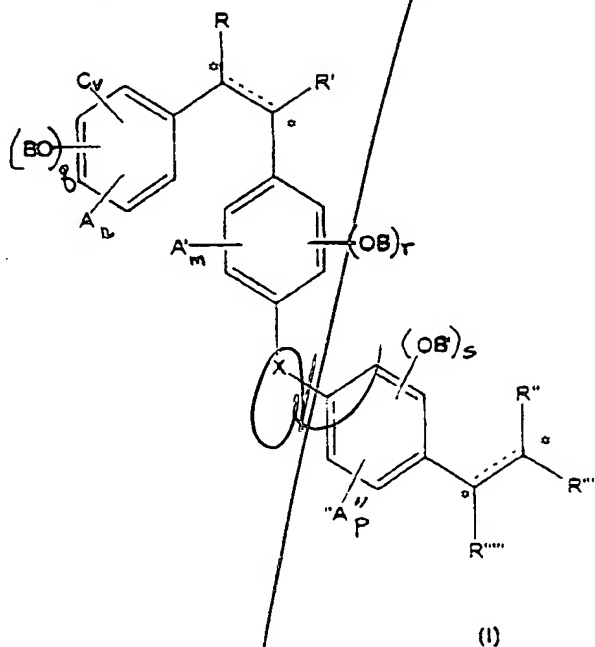
37. A composition according to Claim 31 wherein X is oxygen; R'''' is hydrogen; and R''' and R'''' are independently -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

38. The composition according to Claim 31 wherein the compound comprises:



39. A method for lowering serum triglyceride in a subject comprising administering to said subject an effective serum triglyceride lowering amount of a

composition containing a compound of the formula I in a pharmaceutically acceptable carrier.



wherein stereocenters \* are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR<sub>3</sub>, where R<sub>3</sub> = H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or C<sub>5</sub>-C<sub>20</sub> aryl; CONR<sub>1</sub>R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> may be independently or together H, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl or C<sub>5</sub>-C<sub>20</sub> aryl, NH<sub>2</sub>, OH, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, linear or branched C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkylamino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B'' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxy carbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkyl carboxyl amino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; aroyl, aralkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxy carbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxy carbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>.

40. A method according to Claim 39 wherein C and A are hydrogen.

41. A method according to Claim 40 wherein q=2 and B is methyl.

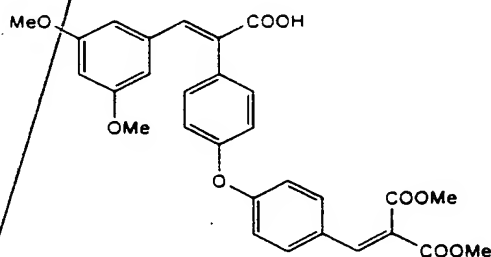
42. A method according to Claim 39 wherein A' is hydrogen and r = O.

43. A method according to Claim 39 wherein A'' is hydrogen and s = O.

44. A method according to Claim 39 wherein R is hydrogen and R' is -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

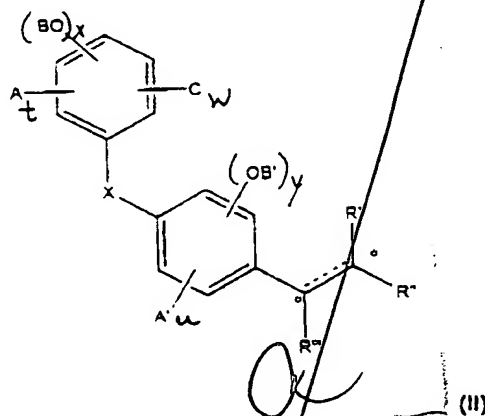
45. A method according to Claim 39 in formula I wherein X is oxygen; R''' is hydrogen; and R'''' and R''''' are independently -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

46. The method according to Claim 39 wherein said compound comprises:





47. A pharmaceutically composition containing a serum triglyceride lowering effective amount of a compound of the formula II in a pharmaceutically acceptable carrier.



wherein stereocenters \* are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

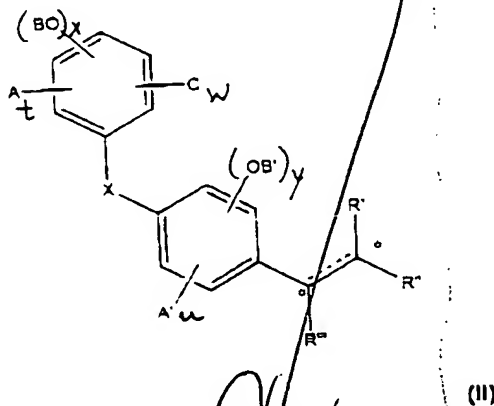
A, A', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkenoyl, C<sub>1</sub>-C<sub>20</sub> alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>6</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>

48. A method for lowering serum triglyceride in a subject comprising administering to said subject an effective serum triglyceride lowering amount of a composition of the formula II.



wherein stereocenters \* are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

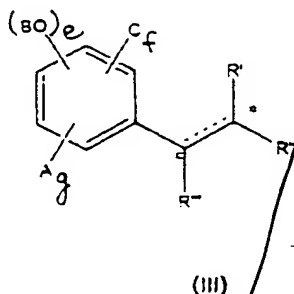
A, A', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkenoyl, C<sub>1</sub>-C<sub>20</sub> alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>6</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> aralkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxy, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxy, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>

49. A pharmaceutically composition containing a serum triglyceride lowering effective amount of a compound of the formula III in a pharmaceutically acceptable carrier.



wherein stereocenters (designated by \*) could be R- or S-.

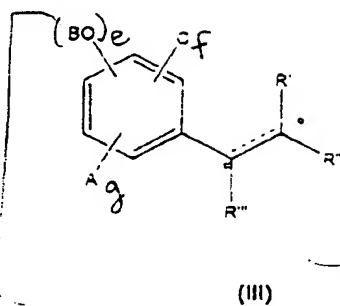
dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR<sub>2</sub>; and f and g are independently integers from 0 to 3;

B is independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>5</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, cyano.

50. A method for lowering serum triglyceride in a subject comprising administering to said subject an effective serum triglyceride lowering amount of a composition of the formula III.



wherein stereocenters (designated by \*) could be R- or S-.

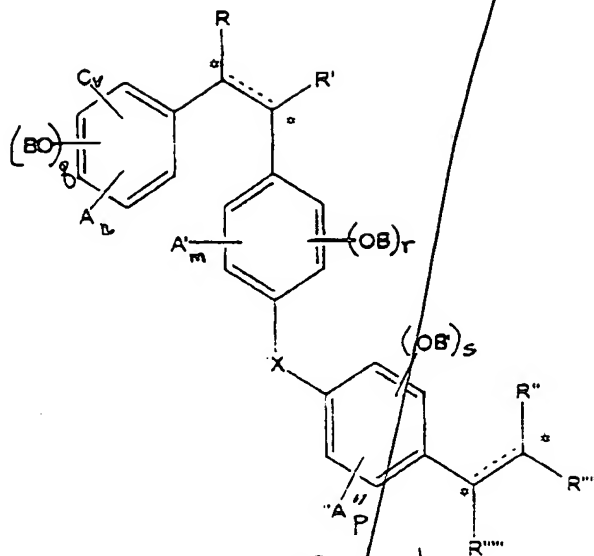
dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR<sub>2</sub>; and f and g are independently integers from 0 to 3;

B is independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>5</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> araalkanoyl, carboxyl, cyan. halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, cyano.

51. A pharmaceutical composition containing a blood pressure lowering effective amount of a compound of formula I in a pharmaceutically acceptable carrier.



(I)

wherein stereocenters \* are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR<sub>3</sub>, where R<sub>3</sub> = H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or C<sub>5</sub>-C<sub>20</sub> aryl; CONR<sub>1</sub>R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> may be independently or together H, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl or C<sub>5</sub>-C<sub>20</sub> aryl, NH<sub>2</sub>, OH, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, linear or branched C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkylamino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B'' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkyl carboxyl amino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; aroyl, aralkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxy carbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxy carbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, or cyano.  
X = NH, O, S, S=O, or SO<sub>2</sub>.

52. A composition according to Claim 51 wherein C and A are hydrogen.

53. A composition according to Claim 52 wherein q=2 and B is [methyl].

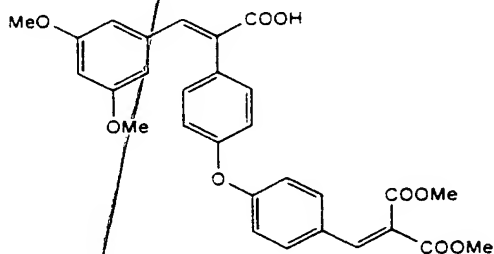
54. A composition according to Claim 51 wherein A' is hydrogen and r = O.

55. A composition according to Claim 51 wherein A'' is hydrogen and s = O.

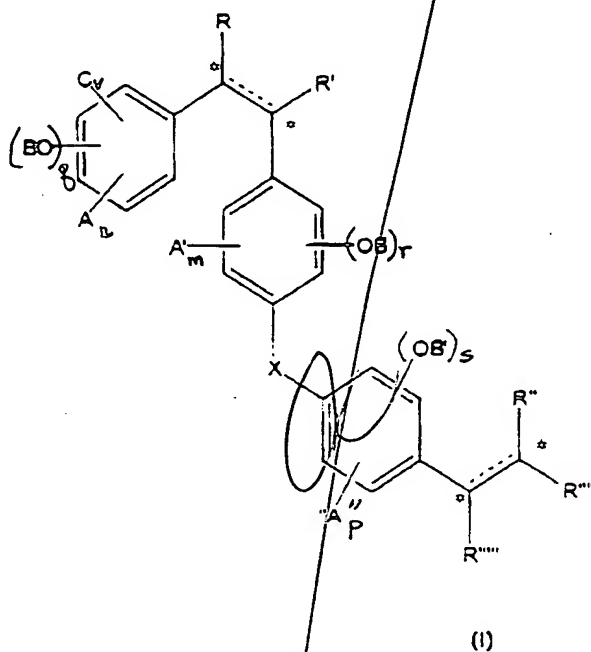
56. A composition according to Claim 51 wherein R is hydrogen and R' is -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

57. A composition according to Claim 51 wherein X is oxygen; R'''' is hydrogen; and R''' and R'''' are independently -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

58. The composition according to Claim 51 wherein the compound comprises:



59. A method for lowering blood pressure in a subject comprising administering to said subject an effective blood pressure lowering amount of a composition containing a compound of the formula I in a pharmaceutically acceptable carrier.



wherein stereocenters \* are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR<sub>3</sub>, where R<sub>3</sub> = H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or C<sub>5</sub>-C<sub>20</sub> aryl; CONR<sub>1</sub>R<sub>2</sub>, where R<sub>1</sub> and R<sub>2</sub> may be independently or together H, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl or C<sub>5</sub>-C<sub>20</sub> aryl, NH<sub>2</sub>, OH, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, linear or branched C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkylamino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B'' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkyl carboxyl amino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; aroyl, aralkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>.

60. A method according to Claim 59 wherein C and A are hydrogen.

61. A method according to Claim 60 wherein q=2 and B is methyl.

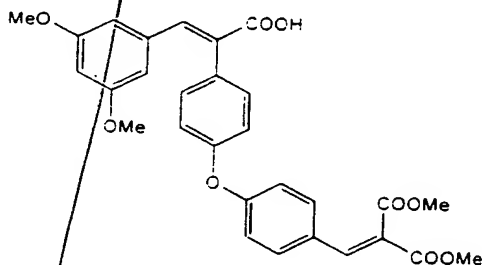
62. A method according to Claim 59 wherein A' is hydrogen and r = O.

63. A method according to Claim 59 wherein A'' is hydrogen and s = O.

64. A method according to Claim 59 wherein R is hydrogen and R' is -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

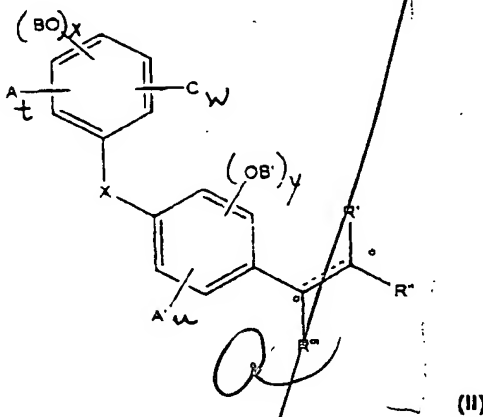
65. A method according to Claim 59 in formula I wherein X is oxygen; R''' is hydrogen; and R'''' and R''''' are independently -COOR<sub>3</sub>, wherein R<sub>3</sub> is hydrogen, a cation, C<sub>1</sub>-C<sub>10</sub> alkyl or C<sub>5</sub>-C<sub>10</sub> aryl.

66. The method according to Claim 59 wherein said compound comprises:





67. A pharmaceutically composition containing a blood pressure lowering effective amount of a compound of the formula II in a pharmaceutically acceptable carrier.



wherein stereocenters \* are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

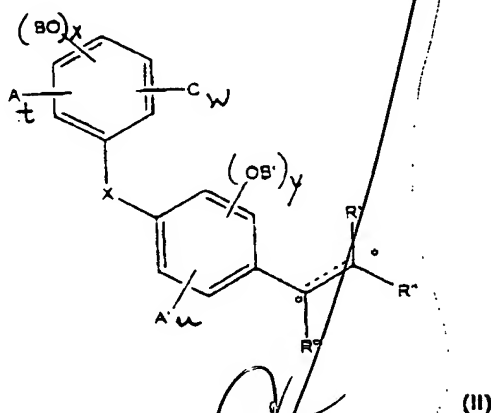
A, A', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkenoyl, C<sub>1</sub>-C<sub>20</sub> alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>6</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxycarbonyl, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>

68. A method for lowering blood pressure in a subject comprising administering to said subject an effective blood pressure lowering amount of a composition of the formula II.



wherein stereocenters \* are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

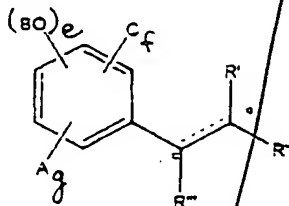
A, A', and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkenoyl, C<sub>1</sub>-C<sub>20</sub> alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>6</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> aralkenoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxy, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxy, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo or cyano.

X = NH, O, S, S=O, or SO<sub>2</sub>

69. A pharmaceutically composition containing a blood pressure lowering effective amount of a compound of the formula III in a pharmaceutically acceptable carrier.



(III)

15 *Sub*  
wherein stereocenters (designated by \*) could be R- or S-.

20 *Q9*  
dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

25 *Cont*  
A and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR<sub>2</sub>; and f and g are independently integers from 0 to 3;

30 B is independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>5</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> aralkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

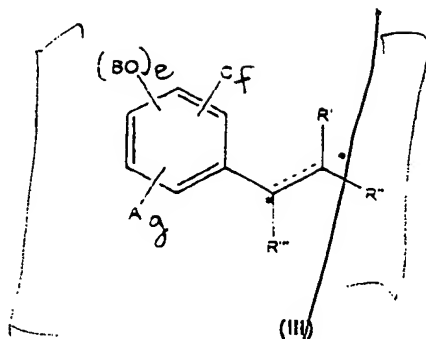
35 R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>5</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> aralkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

70. A method for lowering blood pressure in a subject comprising administering to said subject an effective blood pressure lowering amount of a composition of the formula III.

*Pre-Am only*

*new III*

5



wherein stereocenters (designated by \*) could be R- or S-.

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR<sub>2</sub>; and f and g are independently integers from 0 to 3;

B is independently H, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> acyloxy; C<sub>1</sub>-C<sub>20</sub> linear or branched alkanoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenoyl, C<sub>1</sub>-C<sub>20</sub> linear or branched alkenyl, C<sub>1</sub>-C<sub>20</sub> alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkoxy, C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl amino, C<sub>1</sub>-C<sub>20</sub> alkylcarboxylamino, C<sub>1</sub>-C<sub>20</sub> carbalkoxy, C<sub>5</sub>-C<sub>20</sub> aroyl, C<sub>6</sub>-C<sub>20</sub> araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C<sub>1</sub>-C<sub>20</sub> linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C<sub>1</sub>-C<sub>20</sub> alkoxy, NH<sub>2</sub>, CONH<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> acylamino, C<sub>1</sub>-C<sub>20</sub> alkoxy, OH, C<sub>1</sub>-C<sub>20</sub> alkoxy, halo, cyano.

25

*[Handwritten signature]*